



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,136	02/26/2002	Jacob Cherian	016295.0692	3364

7590

12/04/2006

Roger Fulghum  
Baker Botts L.L.P.  
One Shell Plaza  
910 Louisiana Street  
Houston, TX 77002-4995

EXAMINER

QURESHI, AFSAR M

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/083,136

Applicant(s)

CHERIAN ET AL.

Examiner

Afsar M. Qureshi

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. This office action is responsive to Amendment/Remarks received on 8/31/2006.

In light of amendments, rejection of claims 1-5 and 13-18 is withdrawn.

2. In Argument/Remarks, page 2, the Applicant referred to "Nunn reference and assignments ...", Examiner would like to know if the information, as provided, pertain to Nunn or Tawil et al.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-20 (claim 15 now cancelled) have been considered but are moot in view of the new ground(s) of rejection.

***Claim Objections***

4. Claim 11 is objected to because claim 11 is identical to claim 10 (as noted by the Examiner in Office Action mailed on 3/27/2006)

Applicant is advised that should claim 10 be found allowable, claim 11 will be objected to under 37 CFR 1.75 as being identical thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-14, 15-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tawil et al. ('Tawil'), US 6,625,747).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another", or by an appropriate showing under 37 CFR 1.131.

Art Unit: 2616

Claims 1, 13 and 19. Tawil discloses a method for selecting an alternate storage path between a server 12 and a storage system 22 (figure 1) with plurality of storage device (32, 34, 36, 38, 40, 42). Tawil further discloses that upon failure of an existing storage path (e.g., First switch 18, first controller 24, storage device 32, fig. 1) it identifies the failed storage controller (First controller 24) and selects an alternate storage path with different storage controller (Second controller 20) and one or more storage units (see col. 4, lines 22-41, also, col. 6, lines 63 through co. 7, lines 1-20).

Claim 2. Tawil discloses a method of identifying (monitoring by Multipathing driver 13, fig. 1) the storage controller of the existing path comprising the step of identifying the available storage paths between the server and the storage unit (col. 4, lines 20-25).

Claims 3 - 5. Tawil discloses method steps for identifying the storage controller of the existing storage path by identifying the logical association between ports and storage controller of the storage system (see col. 6, lines 3-16). Tawil further discloses identifying the available storage paths (see col. 4, lines 22-29) and the logical association between ports and storage controllers utilizing logical unit (LUN) in an identifier of the storage device (see col. 6, lines 3-16). As to claim 5, Tawil discloses the existing storage path (e.g., First HBA 14, First Switch 18, First Controller 24, storage devices 32, ...) being the default storage path (see figure 1, col. 4, lines 15-21).

Art Unit: 2616

Claim 6. As discussed in the rejection of claim 1 above, Tawil discloses, in figure 1, Server 12 having a multipath driver 13, storage system 22 comprising multiple ports 32, 34, 36,..., associated to Storage Controllers 24, 26, Storage Units 33, 39. As discussed above, in the rejection of claims 1-5, Multipath driver 13 monitors and selects storage path, and in case of failure, selects an alternate storage path using storage controller different from the storage controller used in the default path (Second HBA 16, Second Switch 20, *Second Controller 26*, etc.).

Claims 7-12. Tawil discloses multiple storage units accessible by multiple storage controllers 24, 26 (claim 8, see figures 1 and/or 2). As to claims 7,9 –11, Tawil discloses a common storage (table) for use in storing and retrieving information by the Multipathing driver in order to identify a storage path. Tawil uses the technique of assigning common world wide name to controller to allow the host to reroute a data request (see col. 2, lines 60 through col. 3, lines 1-15 and col. 6, lines 17-26). As to claim 12, Tawil discloses a data source accessible by the driver that includes an identification of ports through which each storage unit of the storage system is accessible (col. 6, lines 44-62).

Claim 14, 16. As to claims 14 and 16, Tawil discloses method steps of identifying the available storage paths by monitoring (see col. 4, lines 22-25) the relationship between the storage controllers and the ports 32, 34, 36, 38, 40 and 42 of the storage

Art Unit: 2616

system (figure 1) and selecting the default storage path (as discussed above) accordingly.

Claims 17, 18 and 20. Method steps of identifying the available storage paths between server and the storage units by building a table of the available storage paths and identifying the ports for storage controllers, as claimed herein, are already discussed in the rejection of claims 7-12 above (see col. 2, lines 49-53, col. 6, lines 17-25 and col. 7, lines 22-34).

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Beardsley et al. (US 6,061,750; 6,006,342; 5,437,022; 5,640,530)

Odenwald (US 6,996,629)

7 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Afsar M. Qureshi whose telephone number is (571) 272 3178. .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272 7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



AFSAR QURESHI  
PRIMARY EXAMINER  
11/27/2006